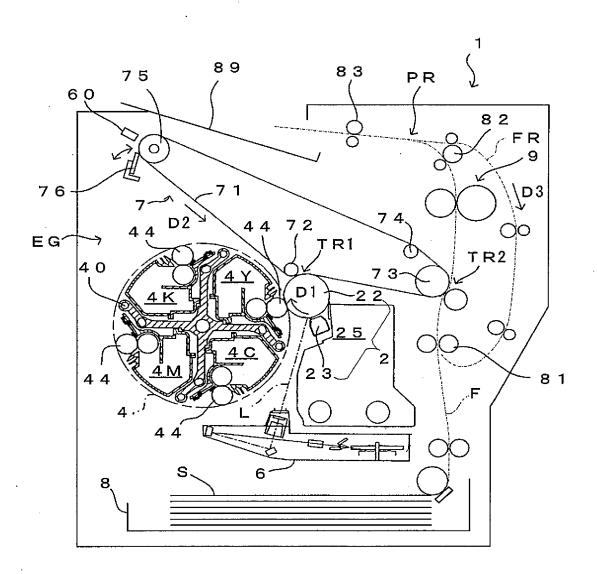
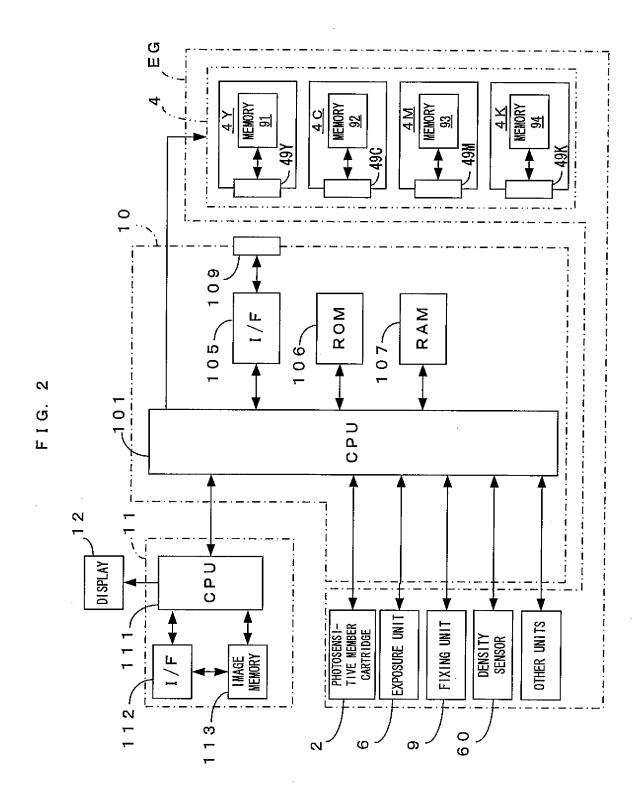
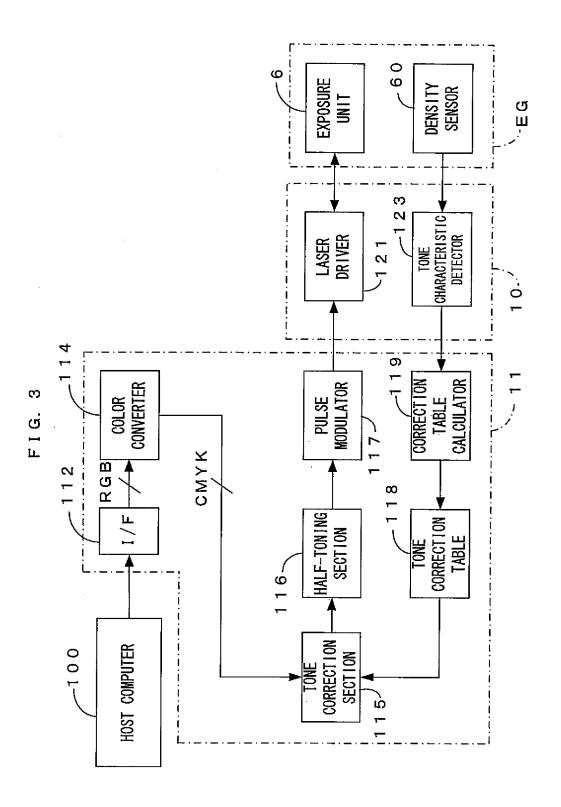
Hogan & Hartson 88522.0051 Hidenori KIN et al. Image Forming Apparatus, Toner Counter and Method... 32 Drawing Sheets; Sheet 1 of 32

FIG. 1



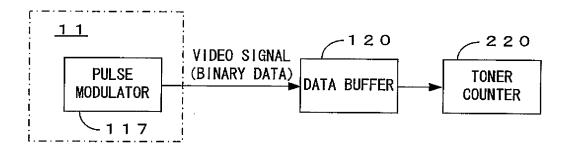


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F I G. 4



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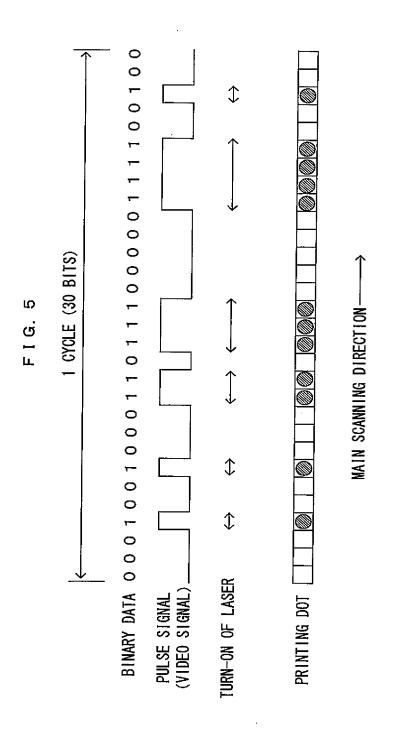
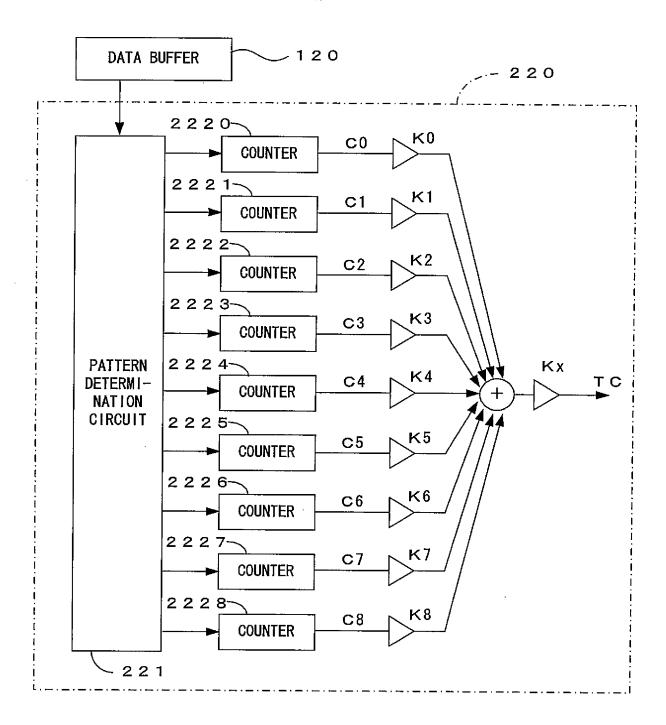


FIG. 6

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Counter and Method...
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FIG. 7



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FIG. 8

NUMBER OF	EXAMPLE OF IMAGE PATTERN	COEFFICIENT	
ADJACENT DOT		SYMBOL	NUMERIC VALUE
0		К0	0.9
1		К1	1.2
2		K2	1.3
3		K3	1.2
4		K4	1.1
5	000	K5	1.0
6		K6	0.95
7		K7	0.9
8		К8	0.9

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MAIN SCANNING DIRECTION Ø 2 Ø  $^{\circ}$  $^{\circ}$ Ø 0 Ø Ø N Ø 0 Ø Ø 0 Ø  $^{\circ}$ 4 Ŋ Ø 4 Ô Ð 9 9 Ŋ 0 က φ 9 Ŋ Θ က īΟ ဖွ Ŋ 0 4 S 9 9 Ŋ 4 Ŋ ဖ 9 Ŋ 4 Ŋ 9 9 Ŋ 4 ល ø 9 4 Ø Ŋ 4 9 4 Ø 4 Ď က Ø 4 Ŋ S N 4 ന Ø 8 Ø

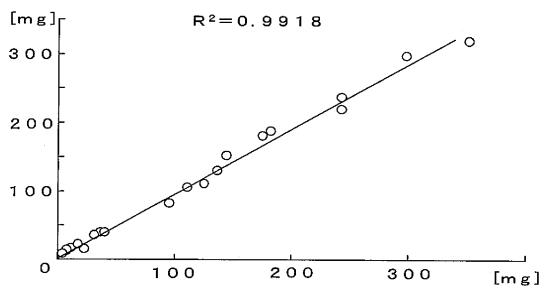
SUB SCANNING

FIG. 9

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FIG. 10



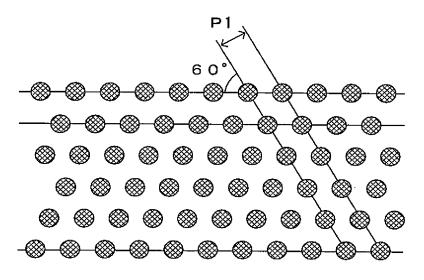


TONER CONSUMPTION AMOUNT (CALCULATED VALUE BY TONER COUNTER)

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### FIG. 11A

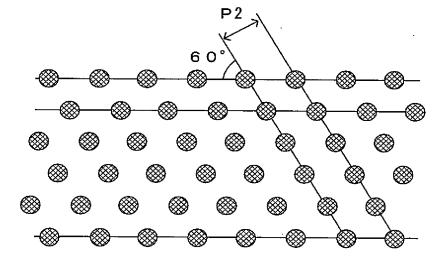
SCREEN A



MAIN SCANNING DIRECTION

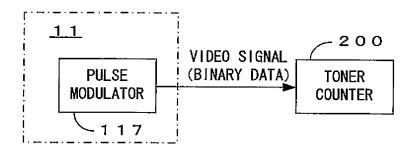
FIG. 11B

SCREEN B



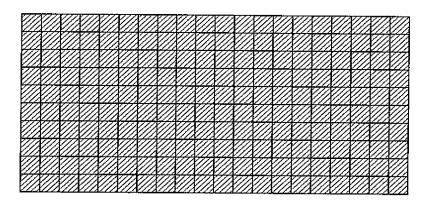
Hogan & Hartson 88522.0051 Hidenori KIN et al. Image Forming Apparatus, Toner Counter and Method... 32 Drawing Sheets; Sheet 12 of 32

FIG. 12

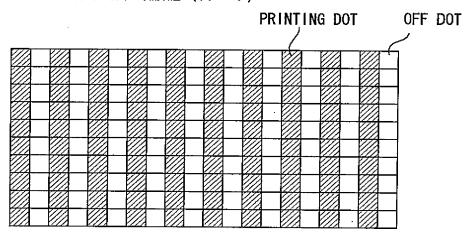


Hogan & Hartson 88522.0051 Hidenori KIN et al. Image Forming Apparatus, Toner Counter and Method... 32 Drawing Sheets; Sheet 13 of 32

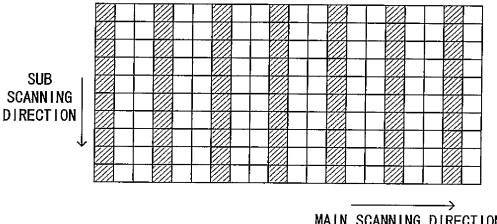
### FIG. 13A SOLID IMAGE (X = 0)



### FIG. 13B 1 ON 1 OFF IMAGE (X = 1)



#### FIG. 13C 1 ON 2 OFF IMAGE (X=2)

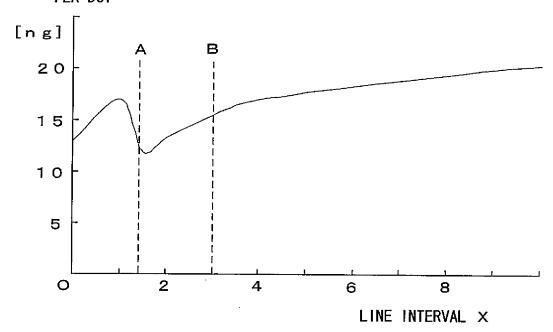


MAIN SCANNING DIRECTION

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FIG. 14

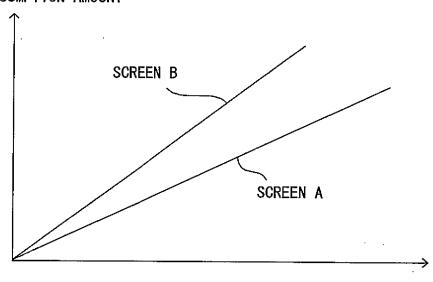
# TONER CONSUMPTION AMOUNT PER DOT



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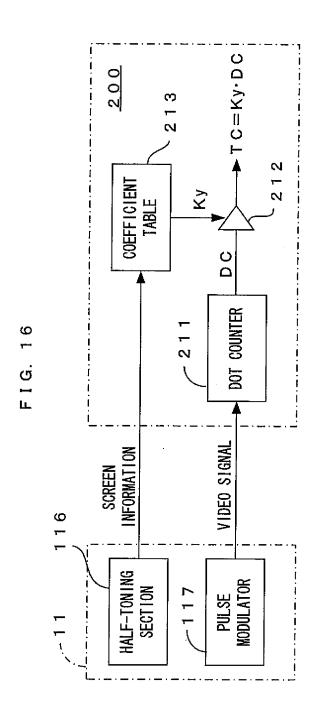
FIG. 15

### TONER CONSUMPTION AMOUNT

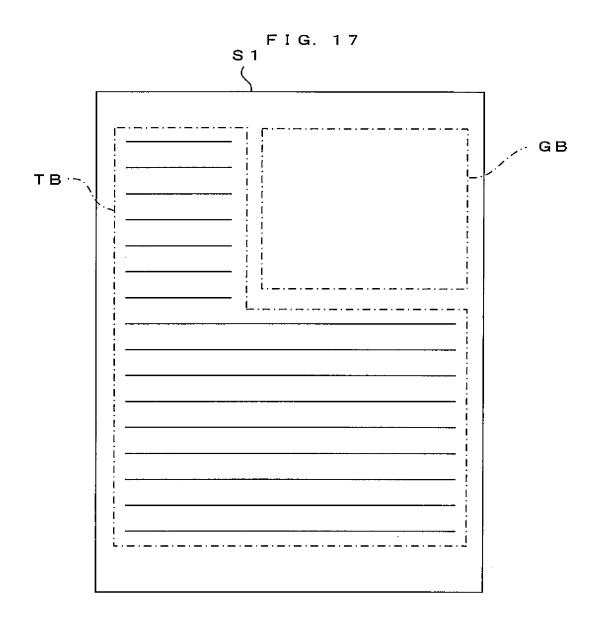


DOT COUNT VALUE

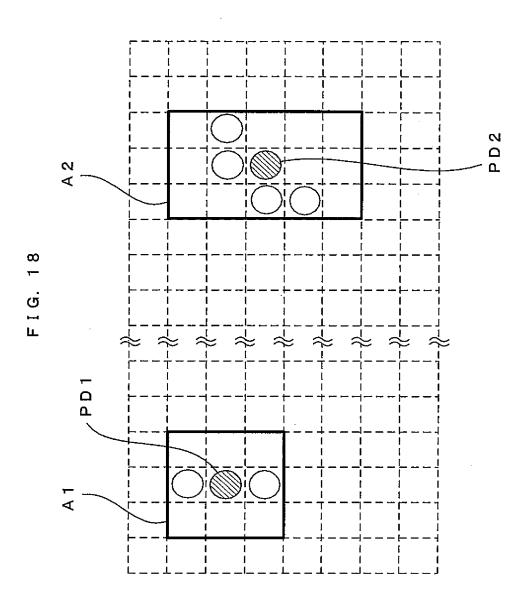
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FIG. 19

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NUMBER OF ADJACENT DOT	TONER CONSUMPTION AMOUNT PER DOT	
0	M100	
1	M101	
2	M102	
3	M103	
4	M104	
5	м105	
6	M106	
7	M107	
8	M108	

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FIG. 20

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NUMBER OF ADJACENT DOT	TONED CONCLUDE LON AMOUNT DED DOT	
NUMBER OF ADJACENT DOT	TONER CONSUMPTION AMOUNT PER DOT	
0	M200	
1	M201	
2	M202	
3	M203	
4	M204	
5	M205	
6	M206	
7	M207	
8	M208	
9	M209	
1 0	M210	
11	M211	
1 2	M212	
1 3	M213	
1 4	M214	

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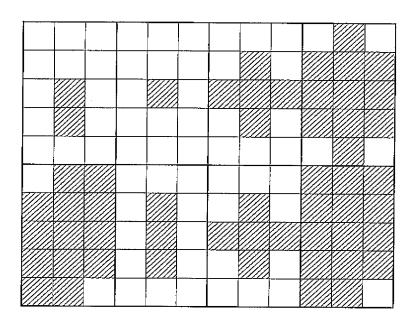
FIG. 21

		SIZE OF MATRIX	TABLE
MONOCHROME		3 × 3	FIRST TABLE
COLOR	CYAN YELLOW	3×5	SECOND TABLE
	MAGENTA BLACK	3 × 3	FIRST TABLE

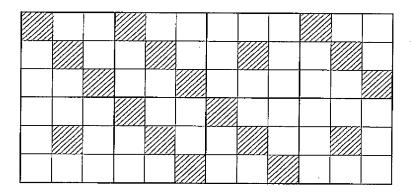
Hogan & Hartson 88522.0051 Hidenori KIN et al. Image Forming Apparatus, Toner Counter and Method... 32 Drawing Sheets; Sheet 22 of 32

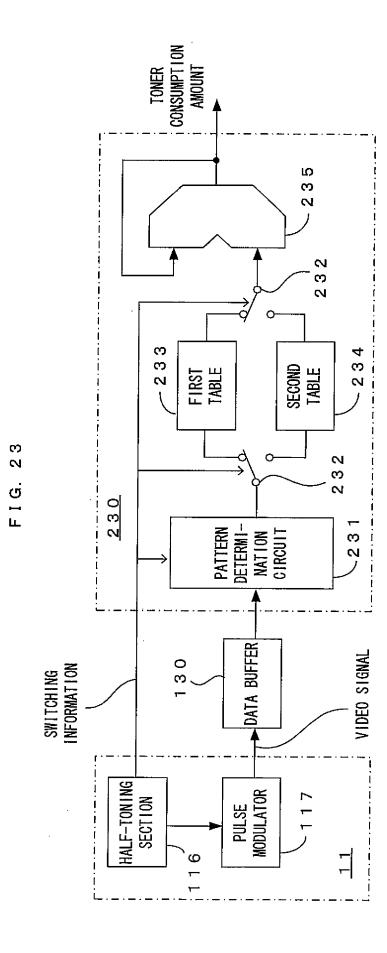
FIG. 22

### SCREEN FOR CYAN AND YELLOW



### SCREEN FOR MAGENTA AND BLACK

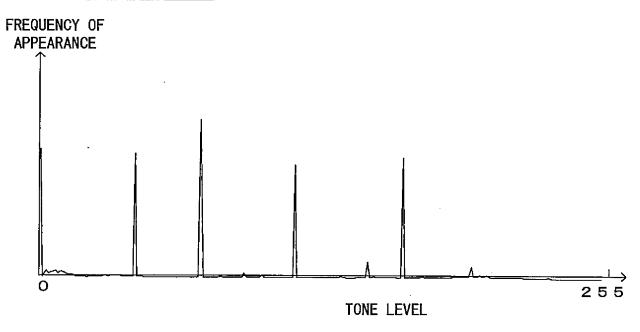




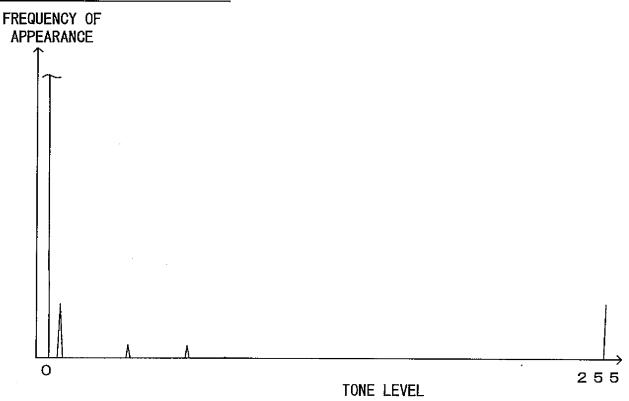
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FIG. 24

## IN A CASE OF HALFTONE IMAGE



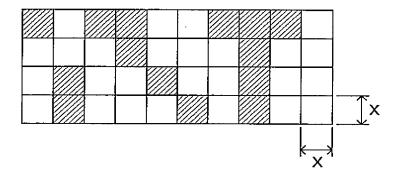
### IN A CASE OF LINE-BASED IMAGE



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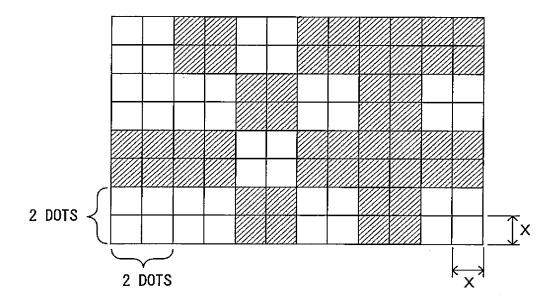
FIG. 25

## RESOLUTION OF IMAGE: 600dpi



X = 1 / 600 [INCH]

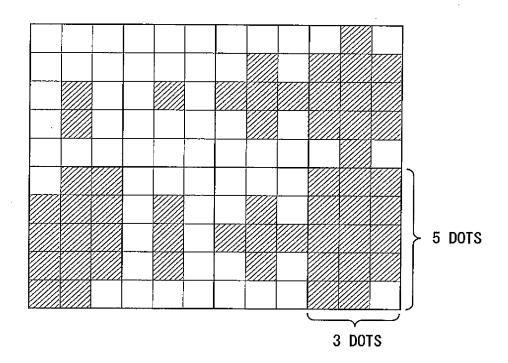
### RESOLUTION OF IMAGE: 300dpi



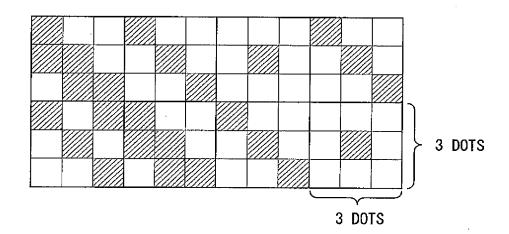
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FIG. 26

### DOT PATTERN OF CYAN COLOR



### **DOT PATTERN OF MAGENTA COLOR**



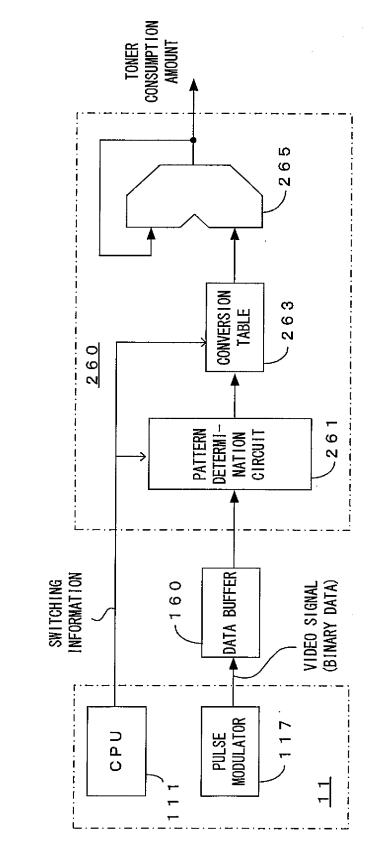
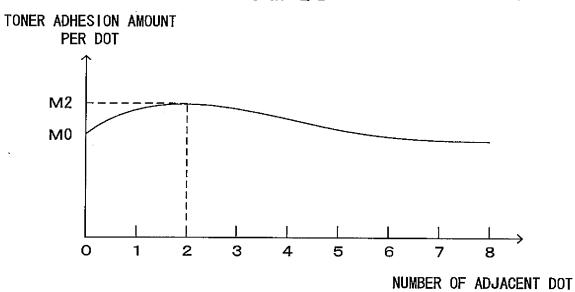


FIG. 27

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FIG. 28



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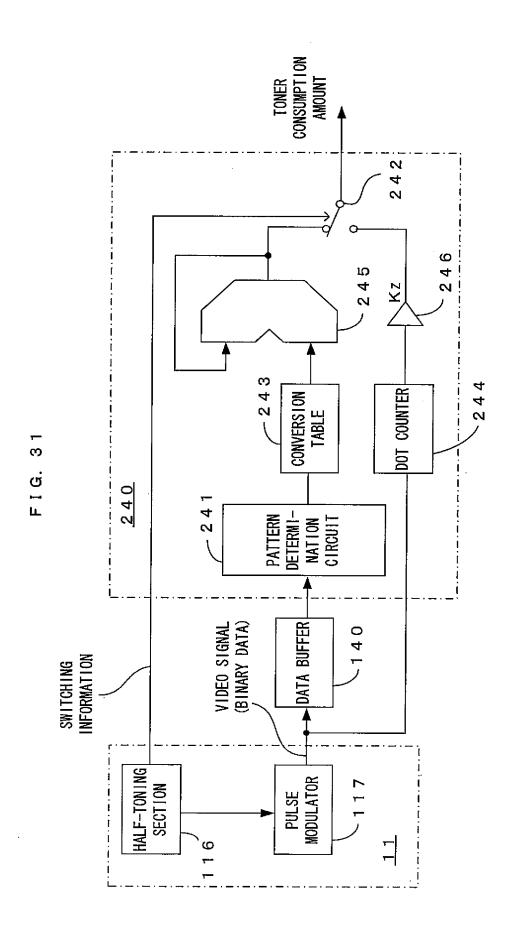
### FIG. 29

NUMBER OF ADJACENT DOT	EXAMPLE OF DOT PATTERN	TONER CONSUMPTION AMOUNT
0		мо
1		М1
2		M2
3		М3
4		М4
5		М5
6		М6
7		M7
8	000 000 000	М8

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FIG. 30

TONER COLOR	PATTERN NUMBER	DOT PATTERN	TONER CONSUMPTION AMOUNT
MAGENTA	0		Mm0
	1		Mm1
	2		Mm2
	3		Mm3
	••		:
	·×		Mmx



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